INTRODUCTION TO THEORETICAL LINGUISTICS

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1

LINGUISTICS: THE SCIENTIFIC STUDY OF LANGUAGE

1.1 Introductory

1.1.1 *Definition of linguistics*

Linguistics may be defined as the scientific study of language. This definition is hardly sufficient to give the reader any positive indication of the fundamental principles of the subject. It may be made a little more revealing by drawing in greater detail the implications contained in the qualification 'scientific'. For the moment, it will be enough to say that by the scientific study of language is meant its investigation by means of controlled and empirically verifiable observations and with reference to some general theory of language-structure.

1.1.2 *Linguistic terminology*

It is sometimes suggested that the terminology, or 'jargon', of modern linguistics is unnecessarily complex. This is a criticism which need not detain us long. Every science has its own technical vocabulary: it is only because the layman takes on trust the established sciences, and especially the 'natural' sciences, that he does not question their right to furnish themselves with special vocabularies. The technical terms used by linguists arise in the course of their work and are easily understood by those who approach the subject sympathetically and without prejudice. It should not be forgotten that most of the terms which the non-linguist employs to talk about language ('word', 'syllable', 'letter', 'phrase', 'sentence', 'noun', 'verb', etc.) originated as technical terms of traditional grammar and are no less 'abstract' in their reference than the more recent creations of linguists. If the contemporary linguist requires different terms, instead of, or in addition to, those familiar to the layman, this is accounted for partly by the fact that the non-technical employment of many of the terms of traditional grammar has rendered them insufficiently precise for scientific purposes and partly by the simple

fact that modern linguistics has in certain respects advanced beyond traditional grammar in its attempt to construct a general theory of language-structure. The technical terms employed in this book will be introduced gradually, with full explanation and as far as possible with reference to traditional terms of general currency. As we shall see, the use of a special vocabulary eliminates a good deal of ambiguity and possible misunderstanding in the discussion of language.

1.1.3 *Objective approach to language*

The chief difficulty facing the person who comes new to the study of linguistics is that of being prepared to look at language objectively. For language is something we tend to take for granted; something with which we are familiar from childhood in a practical, unreflecting way. And, as has often been observed, it requires a particularly strong effort to look at familiar things afresh. Nor is it merely our intuitive or practical familiarity with language that stands in the way of its objective examination. There are all sorts of social and nationalistic prejudices associated with language, and many popular misconceptions fostered by the distorted version of traditional grammar that is frequently taught in the schools. To free one's mind of these prejudices and misconceptions is indeed difficult; but it is both a necessary and a rewarding first step.

1.1.4 *History of linguistics*

Nothing is more helpful to the layman or student making his first acquaintance with the science of linguistics than some knowledge of the history of the subject. Many of the ideas about language which the linguist will question, if he does not abandon them entirely, will seem less obviously self-evident if one knows something of their historical origin. This is true not only of a good deal that is taught formally at school, but also of much that at first sight might appear to be a matter of downright common sense; for, as Bloomfield has remarked of the common-sense way of dealing with linguistic matters, 'like much else that masquerades as common sense it is in fact highly sophisticated, and derives, at no great distance, from the speculations of ancient and medieval philosophers'. As instances of 'common-sense' attitudes to language which derive from what Bloomfield refers to as 'the speculations of ancient and medieval philosophers' one may cite the commonly-held belief that all languages manifest the same

'parts of speech' (in the form in which this belief is usually held and expressed). The traditional theory of 'the parts of speech', and the standard definitions of classical grammar, reflect, as we shall see in due course, ancient and medieval attempts to force together the categories of grammar, logic and metaphysics. Other commonly held views about language derive not so much from philosophical speculation as from the subordination of grammar to the task of interpreting written texts, and especially to that of interpreting works written in Greek and Latin by the classical authors.

But the history of linguistics is of interest today not only in so far as it enables us to free ourselves of certain commonly held misconceptions about language. Linguistics, like any other science, builds on the past; and it does so, not only by challenging and refuting traditional doctrines, but also by developing and reformulating them. As an aid to the understanding of the principles and assumptions governing modern linguistics a knowledge of the history of the subject has therefore a positive, as well as a negative, contribution to make. This point will be abundantly illustrated in the course of the book. It is stressed here because many recent works on linguistics, in describing the great advances made in the scientific investigation of language in the last few decades, have neglected to emphasize the continuity of Western linguistic theory from earliest times to the present day.

It may also be pointed out here that what is generally referred to as 'traditional grammar' (and we shall continue to use this term) is much richer and more diversified than is often suggested in the cursory references made to it by many modern handbooks of linguistics. Much of the earlier history of Western linguistic thought is obscure and controversial. This is mainly due to the fact that most of the original sources have disappeared: from what has survived it is clear that, although one can trace a continuous line of development from Plato and the Sophists to the medieval Schoolmen, throughout this period there were many individual grammarians who were capable of original thought. A definitive and comprehensive history of 'traditional grammar' is yet to be written. Although the necessarily brief outline of the history of linguistics which follows is intended primarily as an introduction to the present state of the subject, we shall try, as far as possible, to relate past developments in linguistic theory to the social conditions and the philosophical ideas current at the time.

1.2 Traditional grammar

1.2.1 *Philosophical origins of traditional grammar*

Traditional grammar, like so many other of our academic traditions, goes back to Greece of the fifth century before Christ. For the Greeks 'grammar' was from the first a part of 'philosophy'. That is to say, it was a part of their general inquiry into the nature of the world around them and of their own social institutions.

1.2.2 *'Nature' and 'convention'*

The Greek philosophers debated whether language was governed by 'nature' or 'convention'. This opposition of 'nature' and 'convention' was a commonplace of Greek philosophical speculation. To say that a particular institution was 'natural' was to imply that it had its origin in eternal and immutable principles outside man himself (and was therefore inviolable); to say that it was 'conventional' implied that it was merely the result of custom and tradition (that is, of some tacit agreement, or 'social contract', among the members of the community—a 'contract' which, since it was made by men, could be broken by men).

In the discussion of language, the distinction of 'nature' and 'convention' was made to turn principally upon the question whether there was any necessary connexion between the meaning of a word and its form. Extreme adherents of the 'naturalist' school, like Cratylus, whose views Plato reports in his dialogue of that name, maintained that all words were indeed 'naturally' appropriate to the things they signified. Although this might not always be evident to the layman, they would say, it could be demonstrated by the philosopher able to discern the 'reality' that lay behind the appearance of things. Thus was born the practice of conscious and deliberate etymology. The term itself (being formed from the Greek stem *etymo-* signifying 'true' or 'real') betrays its philosophical origin. To lay bare the origin of a word and thereby its 'true' meaning was to reveal one of the truths of 'nature'.

Various ways were recognized in which the form of a word might be 'naturally' appropriate to its meaning. First of all, there was the relatively small set of words, like *neigh*, *bleat*, *hoot*, *crash*, *tinkle*, etc. (to use examples from English rather than Greek), which to some degree or other were 'imitative' of the sounds they referred to.

A different, though related, category comprised words (*cuckoo*, *peewit*, etc.) which were 'imitative' of a particular kind of sound, but which denoted the source of the sound, rather than the sound itself. In both cases there is an obvious 'natural' connexion between the physical form of the word and what it signifies. The technical term employed for words belonging to these two categories, and still used in this sense, was *onomatopoeia*. This was simply the Greek word for 'the creation of names'. The fact that it was restricted by grammarians to words which 'imitate' the sounds they denote reflects the view maintained by the Greek 'naturalists' (particularly the Stoic philosophers) that such words form the basic set of 'names' from which language has developed. The fundamental relationship between a word and its meaning was that of 'naming'; and originally words were 'imitative' of the things they named. Onomatopoeic words formed the nucleus of the vocabulary.

But relatively few words are onomatopoeic. Others were demonstrated to be of 'natural' origin by reference to one or more of their constituent sounds. Certain sounds were held to be suggestive, or 'imitative', of particular physical qualities, or activities, being classified as 'smooth', 'harsh', 'liquid', 'masculine', etc. For instance, one might maintain, in the spirit of the 'naturalists', that l is a liquid sound, and that therefore the words *liquid*, *flow*, etc., contain a sound which is 'naturally' appropriate to their meaning. The modern term for this kind of relationship between the constituent sounds of words and their meaning, in so far as it is asserted to be a feature of language, is *sound-symbolism*.

After taking full account of onomatopoeia and sound-symbolism, the Greek etymologists were still left with very many words to explain. At this point they invoked various principles in terms of which words could be derived from, or related to, one another; and these were codified in time as the traditional principles of etymology. We shall not go into these principles here, except to mention that they fall into two types. First, the meaning of a word might be extended by virtue of some 'natural' connexion between the original and the secondary application: cf. the *mouth* of a river, the *neck* of a bottle, etc. (These are examples of *metaphor*, one of the many terms introduced by the Greeks which have passed into traditional grammars and works on style.) Second, the form of a word might be derived from that of another by the addition, deletion, substitution and transposition of sounds (granted some 'natural' connexion in the meanings of the two words). It is only by a very free and uncontrolled use of the

second set of principles, operating upon the form of a word, that the 'naturalists' could maintain their position, claiming to be able to derive all words from a primary set of words of 'natural' origin.

1.2.3 *Analogists and anomalists*

The dispute between 'naturalists' and 'conventionalists' was to endure for centuries, dominating all speculation about the origin of language and the relationship between words and their meaning. Its importance for the development of grammatical theory is that it gave rise to 'etymological' investigations which stimulated and maintained the interest of scholars in classifying the relationships between words. For good and ill, it set the study of grammar in the framework of general philosophical inquiry.

For reasons that need not be discussed here, the controversy between the 'naturalists' and the 'conventionalists' developed rather later (from about the second century B.C.) into a dispute as to how far language was 'regular'. In Greek, as in English, although there are many obvious instances of 'regular' patterns in the language, there are also many exceptions. As an example of a 'regular' pattern in English, take *boy*: *boys*, *girl*: *girls*, *cow*: *cows*, etc. This is an instance of one kind of 'regularity' in language discussed by the founders of traditional grammar. Other types will be illustrated below. The Greek words for regularity and irregularity in this sense of these terms are 'analogy' and 'anomaly'; those who maintained that language was essentially systematic and regular are generally called 'analogists', and those who took the contrary view are referred to as 'anomalists'.

It is to be observed that the term 'analogy' is also being used here in the more particular sense of a mathematical 'proportion', according to which we say, for instance, that the proportion 6:3 equals the proportion 4:2, 2:1, etc. (The term 'proportion' comes from the Latin translation of the Greek word *analogia*.) 'Analogical' reasoning was widely applied by Plato and Aristotle, and their followers, in the study of the sciences. On the basis of a proportion like *boy*: *boys*, we can form 'analogically' thousands of other words: *cow*: *cows*, *girl*: *girls*, etc.; given either *cow* or *cows*, we can 'solve' the equation $boy:boys = cow:x$ or $boy:boys = x:cows$.

The analogists devoted their energies to the establishment of the various models with reference to which the regular words of the language could be classified (the traditional term 'paradigm' is merely

the Greek word for 'model' or 'example'). The anomalists did not deny that there were regularities in the formation of words in language, but pointed to the many instances of irregular words for the formation of which analogical reasoning is of no avail (*child*:*children*, etc.) and also to the multiplicity of different 'analogies' that had to be recognized for words of the same class (this is more striking for Greek or Latin than for English). They also drew attention to the fact that the relationship between the form of a word and its meaning was frequently 'anomalous': for instance the names of the cities *Thebes* or *Athens* are plural nouns in Greek, although they denote single cities; one of the Greek words for 'child' (*paidíon*) is neuter in gender, although children must be either male or female (cf. the German word *Kind*, which is also neuter: examples of this kind of 'anomaly' could be given from many languages). Another example of 'anomaly' was afforded by the existence of synonymy (two or more words with the same meaning) and homonymy (one form with two or more meanings). If language were really a product of human 'convention' one would not expect to find 'irregularities' of these various kinds; and if they existed they should be corrected. The anomalists maintained that language, a product of 'nature', was only partly susceptible of description in terms of analogical patterns of formation, and that due attention had to be given to 'usage', however 'irrational' a particular fact of 'usage' might be.

That the dispute between the 'analogists' and the 'anomalists' was not settled once and for all by the Greeks is hardly surprising. In the first place, the distinction between *descriptive* and *prescriptive* (or *normative*) grammar was not clearly drawn (that is to say, the distinction between describing how people actually speak and write and prescribing how they ought to speak and write: we shall discuss this distinction in some detail later: cf. 1.4.3). Consequently the 'analogist' would tend to 'correct' any apparent 'anomalies' with which he might be confronted rather than change his ideas about the nature of language. Secondly, and more importantly, since 'irregularities' can only be determined with reference to the 'regularities' from which they differ, what is 'irregular' from one point of view, from another may be regarded as 'regular'. Any general dispute as to whether language is 'regular' or not involves the further question: what are in fact the 'regular' patterns? The controversy between the 'analogists' and the 'anomalists' was not therefore, as is sometimes suggested, a pointless dispute resulting from the perverse refusal of both sides to recognize the obvious fact that there are both 'analogies'

and 'anomalies' in language. It was at most a dispute as to what constitutes 'regularity' in language and how much of the apparent 'irregularity' can be shown, by further analysis, to be describable in terms of alternative patterns.

The history of the controversy between the 'analogists' and the 'anomalists' is far from clear. Its earlier development is known only from fragments, and from quotations and comments in the works of later authors; and it is possible that the later writers (in particular Varro, a Roman grammarian of the first century B.C.) may have exaggerated the differences between the two parties to the controversy. Whatever their theoretical pronouncements, both the 'analogists' and the 'anomalists' admitted that there were certain regularities in language, and both contributed to the systematization of grammar. Indeed it was the Stoics, usually said to be 'anomalists', who laid the foundations of traditional grammar in connexion with their 'etymological' work. And the Alexandrian 'analogists' built upon these. Such differences as we find between the Stoics and the Alexandrians can generally be explained in the light of their difference of purpose. The Stoics were interested primarily in the philosophical problem of the origin of language, in logic and in rhetoric; the Alexandrians in literary criticism. Moreover, as we shall see, the Alexandrian scholars were working upon the literary texts of the past; where there was no recorded 'usage' to refer to they invoked the principle of 'analogy' to supply the want of this. Later grammarians, responsible for the codification of what we now call traditional grammar, recognized both 'analogy' and 'usage' ('anomaly') as theoretical principles. However, this did not really solve the problem since, on the one hand, when one is looking for regularities in language, one is frequently faced with alternative ways of relating words and sentences, and, on the other, there still remains the question whose 'usage' is to be taken as correct. Modern linguistics may claim to have made some progress in the solution of these questions, as we shall see, but not to have solved them definitively. The controversy between 'analogists' and 'anomalists' is still with us.

1.2.4 *Alexandrian period*

With the establishment of the great library in the Greek colony of Alexandria at the beginning of the third century B.C. that city became the centre of intense literary and linguistic research. The manuscripts of the authors of the past, and in particular those containing the text

of the Homeric poems, had by now become intolerably corrupt. By comparing different manuscripts of the same works the Alexandrian scholars of the third and second centuries B.C. sought to restore the original text and to decide between genuine and spurious works. Since the language of the classical texts differed in many respects from the contemporary Greek of Alexandria, the practice grew up of publishing commentaries on the texts and grammatical treatises elucidating the various difficulties that might trouble the reader of the earlier Greek poets. Admiration for the great literary works of the past encouraged the belief that the language in which they were written was itself inherently 'purer', more 'correct', than the current colloquial speech of Alexandria and the other Hellenistic centres. The grammars produced by Hellenistic scholars came therefore to have a double purpose: they combined the aim of establishing and explaining the language of the classical authors with the desire to preserve Greek from corruption by the ignorant and unlettered. This approach to the study of language fostered by Alexandrian classicism involved two fatal misconceptions. The first concerns the relation between written and spoken language; the second has to do with the manner in which languages develop. They may both be referred to what I will call the 'classical fallacy' in the study of language.

From the beginning Greek linguistic scholarship had been concerned primarily with the written language. (The term 'grammar', which the Greeks applied to the study of language, bears witness to this: it is derived from the word for 'the art of writing'.) No consistent distinction was drawn between sounds and the letters used to represent them. In so far as the difference between the spoken and the written language was perceived at all, the tendency was always to consider the former as dependent on, and derived from, the latter. The Alexandrian concern with literature merely reinforced this tendency.

The second misconception inherent in the Alexandrian approach to the study of language was the assumption that the language of the fifth-century Attic writers was more 'correct' than the colloquial speech of their own time; and in general that the 'purity' of a language is maintained by the usage of the educated, and 'corrupted' by the illiterate. For more than two thousand years this prejudice was to reign unchallenged. It is all the harder to eradicate in that the terms in which the assumption is usually expressed—'purity' and 'correctness'—are taken as absolutes. It should be clear, however, that these terms have no meaning except in relation to some selected standard.

The assertion that the language of Plato is a 'purer' form of Greek than, let us say, that of some illiterate artisan of Alexandria is therefore not so much false as either meaningless or tautological. We shall return to this point and to a more detailed discussion of the relation between written and spoken language towards the end of the present chapter (cf. 1.4.2).

1.2.5 *Greek grammar*

We may now look at some of the more important particular features of the grammatical analysis of their own language carried out by the Greeks. To those who have been familiar from their school-days with the various grammatical categories employed in traditional descriptions of Greek, it might very well appear that the recognition of just these categories and no others would impose itself immediately upon anyone who set himself the task of analysing the language. Even the most superficial knowledge of the history of Greek grammatical scholarship shows us that this is not true. The particular analysis reflected in standard school-grammars of Greek was so far from being self-evident that it took some six centuries to elaborate (from the fourth century B.C. to the second century A.D.). Moreover it is not the only analysis possible, and is perhaps not even the best. In any case, it could not reasonably be said that slightly different ways of describing the language favoured by some of the Greek grammarians are necessarily inferior to that which was eventually standardized and handed to posterity as *the* grammar of Greek. In the following brief account of the historical development of the traditional grammatical framework the various categories recognized by the Greeks and their successors will not be discussed in any detail. Such discussion will be postponed until the ground has been prepared in subsequent chapters.

Protagoras, one of the earliest and most influential of the fifth-century Sophists, is credited with the distinction of three *genders* in Greek. It is Plato (*c.* 429–347 B.C.) who, as far as we know, first explicitly distinguished beteeen *nouns* and *verbs*. It may be noted, however, that the two classes of words defined by Plato as 'nouns' and 'verbs' were not co-extensive with the classes to which these labels were given in the later systems of analysis upon which our school-grammars are based. As defined by Plato, 'nouns' were terms that could function in sentences as the subjects of a predication and 'verbs' were terms which could express the action or quality predi-

cated. (Roughly speaking, the *subject* of a predication names the thing about which something is said, and the *predicate* is that part of the sentence which says something about the thing named by the subject: cf. 8.1.2.)

Two things may be observed. First, the definition of the major grammatical classes, 'nouns' and 'verbs', was made on logical grounds: i.e. as constituents of a proposition. Second, what we now call verbs and adjectives were put together in the same class. Even when later Greek grammarians abandoned the classification established by Plato, they did not replace it with the tripartite system into nouns, verbs and adjectives, with which we are familiar, but substituted another bipartite system, which brought together what we call nouns and adjectives. Little attention was given at first to words which were not members of the major classes.

It was not until medieval times that the division of words into nouns, verbs and adjectives was made. Aristotle (384–322 B.C.) kept the Platonic distinction between 'nouns' and 'verbs', but added to these a further distinct class. These were the 'conjunctions'; by this term Aristotle meant all those words which were not members of the major classes, 'nouns' and 'verbs'. He also took over from his predecessors the threefold classification of gender. He observed, however, that the names of many 'things' (the term employed by Protagoras to label the third gender) were grammatically either 'masculine' or 'feminine' in Greek, and he introduced the term 'intermediate' to refer to the third gender. (Later, that which was neither 'masculine' nor 'feminine' was called, quite simply, 'neither'; and it is the Latin translation of this which has given us the traditional term 'neuter'.) A more significant advance made by Aristotle was his recognition of the category of *tense* in the Greek verb: that is to say, he noted that certain systematic variations in the forms of the verb could be correlated with such temporal notions as 'present' or 'past'. His teaching on this point, however (though more explicit than Plato's), is far from clear.

Of the several different 'schools' of Greek philosophy, it was the Stoics who gave the most attention to language. The reason for this lay in their belief that right conduct was a matter of living in harmony with 'nature' and that knowledge consisted in the conformity of our ideas with the real things in 'nature', of which these ideas are, or should be, the image. Language was therefore central to Stoic philosophy, and, in particular, to the part to which they gave the term 'logic', but which included also what we should call epistemology

and rhetoric, as well as grammar. One of the first and most fundamental distinctions they made was that between form and meaning, 'that which signifies' and 'that which is signified'. But the Stoics did not take language to be a direct reflection of 'nature'. For the most part they were 'anomalists', insisting on the lack of correspondence between words and things and on the illogicalities of language. Earlier members of the 'school' distinguished four parts of speech ('noun', 'verb', 'conjunction', 'article'); later members five (by separating 'common nouns' and 'proper nouns'). The adjective was classed with the noun. The classification of what we now call *inflexion* (e.g. the relationship between such forms, in English, as *boy*, *boys*, or *sing*, *sang*, *sung*) was greatly developed by the Stoics. It was they too who gave to the term *case* the sense which it has preserved in standard grammatical usage ever since, distinguishing between the true form of the noun, the 'upright' case (what we now refer to as the nominative), and the 'oblique' cases, which they regarded as deviations from the upright. They realized that another factor in addition to time was involved in determining the form of Greek verbs; namely, the completion or non-completion of the action expressed by the form in question. They distinguished between the *active* and the *passive*; and between *transitive* and *intransitive* verbs.

The Alexandrian scholars carried further the work of the Stoic grammarians. And it was in Alexandria that what we now call the 'traditional' grammar of Greek was more or less definitively codified. Unlike most of the Stoics, the Alexandrian grammarians were 'analogists'; and their search for regularities in language led them to establish 'canons', or patterns, of inflexion. The grammar of Dionysius Thrax (late second century B.C.) was, to the best of our knowledge, the first comprehensive and systematic grammatical description to be published in the western world. In addition to the four Stoic parts of speech Dionysius recognized also the *adverb*, the *participle* (so called because of its 'participation' in both nominal and verbal characteristics), the *pronoun*, and the *preposition*. All Greek words were classified in terms of *case*, *gender*, *number*, *tense*, *voice*, *mood*, etc. (cf. chapter 7). Dionysius did not deal explicitly with syntax, the principles according to which words were combined into sentences. This part of the grammatical description of Greek was carried out some three centuries later, less systematically, however, by Apollonius Dyscolus (second century A.D.).

1.2.6 *The Roman period*

We have now traced briefly the development of grammar among the Greeks. Less need be said about the work of the Latin grammarians. It is a matter of common knowledge that in every sphere of Roman scholarship, art and literature, Greek influence was supreme. From the second century B.C., and in some cases earlier, the Roman aristocracy enthusiastically adopted Greek culture and Greek methods of education. Their children were brought up to speak, read and write Greek as well as Latin, and frequently went to complete their education in one of the great Hellenistic centres of philosophy and rhetoric. It is hardly surprising therefore to find that the Latin grammarians were almost wholly dependent on their Greek models. The influence of both the Alexandrians and the Stoics can be seen in Varro's work on the Latin language (first century B.C.). And at Rome, as in Greece, grammatical studies remained subservient to philosophy, literary criticism and rhetoric. The controversy between 'analogists' and 'anomalists' was kept alive and, with other grammatical points, was the subject of a good deal of dilettante discussion. Caesar himself wrote a grammatical treatise *On Analogy* (which he dedicated to Cicero) in the midst of his military campaigns in Gaul.

The Roman grammarians followed their Greek models not only in their general assumptions about language, but also in points of detail. A typical Latin grammar was organized, as was the grammar of Dionysius Thrax, in three sections. The first section would define the scope of grammar as the art of correct speech and of the understanding of the poets, and would deal also with letters and syllables. The second section would treat of the 'parts of speech' and give, in greater or less detail, the variations they underwent according to tense, gender, number, case, etc. Finally there would be a discussion of good and bad style, warnings against common 'faults' and 'barbarisms', and examples of the recommended 'figures of speech'.

In dealing with the 'parts of speech' the Latin grammarians made only such minor modifications as the differences between Greek and Latin forced to their attention. The fact that the two languages are very similar in their general structure doubtless encouraged the view that the various grammatical categories elaborated by the Greek scholars—the 'parts of speech', case, number, tense, etc.—were universal and necessary categories of language. This view was to be maintained explicitly by medieval grammarians.

The later period of Latin grammatical scholarship, the period of